

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended): ~~4.—A~~ An implantable medical prosthesis for maintaining lumen patency comprising a substantially cylindrical hollow body having a distal end and a proximal end, the body being formed from a self-supporting non-metallic graft material and at least a portion of the graft material ~~including~~ having a profile comprising a geometric pattern including plurality of pleats disposed in a Z pattern in both a radial and longitudinal direction configured to provide radial support in a tubular organ.

2. (Original): The prosthesis of claim 1 further comprising a distal anchor connected to the distal end of said prosthesis.

3. (Original): The prosthesis of claim 2 wherein the distal anchor includes a metal support structure.

4. (Original): The prosthesis of claim 1 further comprising a proximal anchor connected to the proximal end of said prosthesis.

5. (Original): The prosthesis of claim 4 wherein the proximal anchor includes a metal support structure.

6. (Original): The prosthesis of claim 1 wherein at least a section of the self-supporting non-metallic graft material is woven.

7. (Original): The prosthesis of claim 1 wherein at least a section of the self-supporting non-metallic graft material is non-woven.

8. (Original): The prosthesis of claim 1 wherein at least a section of the self-supporting non-metallic graft material is knitted.

9. (Original): The prosthesis of claim 1 wherein the self-supporting non-metallic graft material includes polyester.

10. (Original): The prosthesis of claim 1 wherein the self-supporting non-metallic graft material includes polypropylene.

11. (Original): The prosthesis of claim 1 wherein the self-supporting non-metallic graft material includes polyethylene.

12. (Previously Presented): A prosthesis for maintaining lumen patency comprising a hollow body portion having a distal end and a proximal end, the body being formed from a self-supporting non-metallic graft material and at least a portion of the graft material including a plurality of pleats disposed in a pattern in both a radial and longitudinal direction that provides radial support to the body while maintaining flexibility.

13. (Withdrawn): The prosthesis of claim 12 wherein the pleats are disposed in a sinusoidal pattern.

14. (Withdrawn): The prosthesis of claim 12 wherein the pleats are disposed in an elliptical pattern.

15. (Withdrawn): The prosthesis of claim 12 wherein the pleats are disposed in an helical pattern.

16. (Withdrawn): The prosthesis of claim 12 wherein the pleats are disposed in an oblique pattern.

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17. (Cancelled): A prosthesis for maintaining lumen patency comprising:
a hollow body portion comprising a non-metallic graft material; and
means for providing radial support to the body portion.